PATENT Attorney Docket No.: 02307K-026726US Client Ref. No.: 88-001-A Con

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Lewis T Williams et al.

Application No.:

Filed: December 19, 2001

For: HUMAN PLATELET-DERIVED **GROWTH FACTOR RECEPTORS**

Examiner: Unassigned

Art Unit:

1646

PRELIMINARY AMENDMENT

Box Sequence P.O. Box 2327 Arlington, VA 22202

Sir:

In response to the Notice To File Corrected Application Papers mailed February 1, 2002, and in order to comply with Requirements For Patent Applications Containing Nucleotide Sequence and/or Amino Acid Sequence Disclosures, 37 C.F.R. § 1.821-1.825, Applicants submit that the computer readable form in the instant application is identical to the Sequence Listing filed in Application No. 08/461,917, filed June 5, 1995. In accordance with 37 C.F.R. § 1.821(e), please use the computer readable form filed in that application as the computer readable form for the instant application.

It is understood that the Patent and Trademark Office will make the necessary change in the application number and filing date for the computer readable form that will be used in the instant application. A paper copy of the Sequence Listing is included for incorporation. into the Specification.

Please amend the specification in adherence with 37 C.F.R. § 1.821-1.825 as follows:

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IN THE SPECIFICATION:

Please replace the paragraph beginning on page 17, line 35, with the following amended paragraph:

The nucleotide sequence of a cDNA sequence encoding one B-hPDGF-R allele is set forth in Table 2 together with the deduced amino acid sequence of the receptor precursor (SEQ ID NOS:1-2). The following descriptions indicate presumed gross structural and functional characterizations based upon analogy to the mouse and other growth factor receptors and proteins.

Please replace the paragraph beginning on page 20, line 1, with the following amended paragraph:

The nucleotide sequence of a cDNA sequence encoding one allele of a type A hPDGF-R is set forth in Table 3, together with the deduced amino acid sequence of the receptor (SEQ ID NOS:3-4). The structural features, as described, are again based upon analogy to the mouse PDGF receptors and other growth factor receptors and proteins.

Please replace Table 4 on page 62 with the following amended table:

Peptides	Sequence	SEQ ID NO.
Y719	GGYMDMSKDESIDYVPMLDM	SEQ ID NO:5
Y719P	GGYMDMSKDESIDYVPMLDM *	SEQ ID NO:6
Y708P	GGYMDMSKDESIDYVPMLDM *	SEQ ID NO:7
Y719P short	MDMSKDESIDYVPMLDM *	SEQ ID NO:8
Y708P short	GGYMDMSKDESID *	SEQ ID NO:9
Y708P/F719	GGYMDMSKDESIDFVPMLDM *	SEQ ID NO:10
[Y] <u>F</u> 708/Y719P	GGFMDMSKDESIDYVPMLDM	SEQ ID NO:11
Y708/Y719P	* * * GGYMDMSKDESIDYVPMLDM	SEQ ID NO:12

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	*	
Y719P scrambled	MMDIKVPMDEYMSDYSDLGG	SEQ ID NO:13
The asterisks (*) indicate the position of a phosphate group		

Please replace the paragraph beginning on page 73, line 25, with the following amended paragraph:

The type A receptor was isolated as described for the type B receptor, above, except that different probes were used and hybridization and screening were performed under low stringency conditions, as described below. In particular, a region in the type B receptor tyrosine kinase sequence having a high degree of homology to published tyrosine kinase amino acid sequences was identified and had the amino acid sequence, HRDLAARN (amino acid residues 816-823 of SEQ ID NO:2). Oligonucleotide probes encoding the tyrosine kinase consensus sequence were prepared having the following sequences (SEQ ID NO:14):

GTT(G/C)CGXGCXGCCAGXTC(G/C)CGXTG,

where G/C indicates either G or C was used and X indicates any of A, T, C or G was used. The human placenta λGT10 cDNA library was screened as described above but with low stringency conditions using a buffer with 6X SSC 0.1% SDS and 5X Denhardt's solution at 42°C as follows. Filters were screened by washing at 52°C in 2X SSC. A clone encoding the type A receptor was isolated and sequenced by the procedure described for the type B receptor gene.

Please insert the accompanying paper copy of the sequence listing at the end of the application.

REMARKS

Applicants request entry of this amendment in adherence with 37 C.F.R. § 1.821-1.825. The information contained in the computer readable disk of Application No. 08/461,917 was prepared through the use of the software program "PatentIn" and identical to the paper copy. This amendment contains no new matter.

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Attached hereto is a marked-up version of the changes made to the specification by the amendment. The attached pages are entitled "VERSION WITH MARKINGS TO SHOW **CHANGES MADE."**

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

Andrew T. Serafini Reg. No. 41,303

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

The paragraph beginning on page 17, line 35, has been amended as follows:

The nucleotide sequence of a cDNA sequence encoding one B-hPDGF-R allele is set forth in Table 2 together with the deduced amino acid sequence of the receptor precursor (SEQ ID NOS:1-2). The following descriptions indicate presumed gross structural and functional characterizations based upon analogy to the mouse and other growth factor receptors and proteins.

The paragraph beginning on page 20, line 1, has been amended as follows:

The nucleotide sequence of a cDNA sequence encoding one allele of a type A
hPDGF-R is set forth in Table 3, together with the deduced amino acid sequence of the receptor
(SEQ ID NOS:3-4). The structural features, as described, are again based upon analogy to the
mouse PDGF receptors and other growth factor receptors and proteins.

Table 4 on page 62 has been replaced with the following amended table:

D 4:1		CEO ID MO
Peptides	Sequence	SEQ ID NO.
Y719	GGYMDMSKDESIDYVPMLDM	SEO ID NO:5
	*	
Y719P	CCVMDMCKDECIDYAADMI DM	SEO ID NO.
1/19P	GGYMDMSKDESIDYVPMLDM	SEQ ID NO:6
	*	
Y708P	GGYMDMSKDESIDYVPMLDM	SEQ ID NO:7
	*	·
Y719P short	MDMSKDESIDYVPMLDM	SEO ID NO:8
	*	
Y708P short	GGYMDMSKDESID	SEO ID NO:9
	*	
Y708P/F719	GGYMDMSKDESIDFVPMLDM	SEQ ID NO:10
	*	
[Y] <u>F</u> 708/Y719P	GGFMDMSKDESIDYVPMLDM	SEO ID NO:11
[-]=	* *	110.11
V709/V710B	CCVMDMCKDECIDAYADMI DM	CEO ID NO 12
Y708/Y719P	GGYMDMSKDESIDYVPMLDM	SEQ ID NO:12
	*	

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Y719P scrambled	MMDIKVPMDEYMSDYSDLGG	SEQ ID NO:13		
The asterisks (*) indicate the position of a phosphate group				

The paragraph beginning on page 73, line 25, has been amended as follows:

The type A receptor was isolated as described for the type B receptor, above, except that different probes were used and hybridization and screening were performed under low stringency conditions, as described below. In particular, a region in the type B receptor tyrosine kinase sequence having a high degree of homology to published tyrosine kinase amino acid sequences was identified and had the amino acid sequence, HRDLAARN (amino acid residues 816-823 of SEQ ID NO:2). Oligonucleotide probes encoding the tyrosine kinase consensus sequence were prepared having the following sequences (SEQ ID NO:14):

GTT(G/C)CGXGCXGCCAGXTC(G/C)CGXTG,

where G/C indicates either G or C was used and X indicates any of A, T, C or G was used. The human placenta λGT10 cDNA library was screened as described above but with low stringency conditions using a buffer with 6X SSC 0.1% SDS and 5X Denhardt's solution at 42°C as follows. Filters were screened by washing at 52°C in 2X SSC. A clone encoding the type A receptor was isolated and sequenced by the procedure described for the type B receptor gene.

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